1. Define the **Coriolis Effect** (see Pearson textbook pg. 535).

2. Which way (**right** or **left**) are moving objects deflected in the **Northern Hemisphere**? What about moving objects in the **Southern Hemisphere**?

3.Obtain a **globe** and a **dry erase marker** from the clock side of the room**.** Ensure that the nut is tight to the bottom side of the globe’s base by placing a finger to the screw head on the topside of the base and hand tightening the nut on the bottom side.

4. Describe how the Earth rotates using directions (North/East/South/West).

5. When looking over the poles, as if looking down on the North Pole from space for example, does the Earth rotate clockwise or counterclockwise? Be sure to check over BOTH poles!

6. Consider this: the sky appears to rotate about (around) Polaris once per day due to Earth’s rotation. From our perspective on Earth looking up, would the sky (stars, planets, etc.) rotate clockwise or counter clockwise?

7. Hold the globe still and using the dry erase marker draw a straight line from the **Equator to the North Pole**. Next, spin the globe so there is about 1-1.5 rotations/second and draw another straight line from the Equator to the North Pole as before. Do this swiftly so that your marker travels from the Equator to the North Pole in about .5 seconds or less. The line you draw will likely by very light, but you can trace over it afterwards. Practice a few times until you get a line you are happy with, and then take the time to bold that line by tracing over it again with marker while the globe is still.

8. Draw some arrows on the line indicating the direction of motion from the Equator to the North Pole. Does the path you drew while the globe was spinning bend to the Right or the Left? (Examine multiple points on the line you drew to answer this question – the deflection should be consistent for each point you examine).

9. Repeat step 7-8 for the following: **North Pole to Equator**, **Equator to South Pole**, **South Pole to Equator**. Determine which way the path is bending in each case:

a. North Pole -> Equator \_\_\_\_\_\_\_\_\_

b. Equator -> South Pole \_\_\_\_\_\_\_\_\_

c. South Pole -> Equator \_\_\_\_\_\_\_\_\_

10. What are the four characteristics of the Coriolis Effect?